

1082 Test Gauge

FEATURES

- MircoSpan[™] adjustment eases span calibration
- Mirror-band dial and knife-edge pointer eliminates paralax error while assuring easy readability of precise measurements
- Teflon® coated, SS movement
- Accuracy complies with ±0.25% of span (ASME B40.1 Grade 3A)
- Externally adjustable dial

TYPICAL USES

- Test Benches
- Specialized OEM Equipment
- Test and Measurement & Validation
- Calibration Labs

| SPECIFICATIONS | | | | | | | |
|------------------------------|---|--|--|--|--|--|--|
| Accuracy: | ±0.25% of span (ASME B | 340.100 Grade 3A) | | | | | |
| Ranges: | Vacuum, Compound to 10 | 0,000 psi | | | | | |
| Sizes: | 4½", 6"or 8½" | | | | | | |
| Process Connection Location: | Lower or Back | | | | | | |
| Process Connection: | 1/4 NPT Male or 1/2 NPT Ma | ale | | | | | |
| Dial: | | Externally adjustable aluminum, black numerals with polished mirror band | | | | | |
| Case Style: | Solid front | Solid front | | | | | |
| Movement: | 400 Series SS rotary design, Teflon® S coated bearings, micrometer span adjustment, bimetallic temp. compensator (0.005%/per °F Max. temperature error) | | | | | | |
| Pointer: | Black painted aluminum edge tip | with red-painted, knife | | | | | |
| Mounting Options: | Stem or flush | | | | | | |
| Weather Protection: | Case not sealed, recomm protected environment or | | | | | | |
| Approvals: | CRN | | | | | | |
| WETTED COMPO | NENTS | | | | | | |
| Bourdon Tube | Process Connection | Joints | | | | | |
| Bronze | Brass | Silver Brazed | | | | | |
| Monel® | Monel® | Welded | | | | | |

Ring

Hinged steel, black

wrinkle finish



1082

41/2", 6", 81/2" dial sizes



Temperature Compensated Movement



The MicroSpan™ adjustment permits precise adjustments to achieve zero error in calibration at zero and 100% of scale.

Externally Adjustable Dial



KEY BENEFITS

- Temperature-compensated movement significantly reduces temperature error
- Rugged SS construction
- Compact design

| MIN/MAX TEMPERATURE LIMITS | | | | | | | | | |
|----------------------------|-----------------------------------|------------------------------------|------------------------------------|--|--|--|--|--|--|
| Version | Ambient | Process | Storage | | | | | | |
| Dry | -20°F to 200°F (-29°C to 93°C) | -20°F to 250°F (-29°C to 121°C) | -40°F to 250°F (-40°C to 121°C) | | | | | | |

NON-WETTED COMPONENTS

Case

Aluminum, solid front,

black epoxy coated

Window

Glass



1082 Test Gauge

| ORDERING CODE | Example: | 45 | 1082 | Р | S | 02 | L | 100# | -XPD |
|---|------------------------------|----|------|---|---|----|---|------|------|
| Dial Size | | | | | | | | | |
| 45 - 41/2" dial | | 45 | | | | | | | |
| 60 - 6" dial | | | | | | | | | |
| 85 - 8½" dial | | | | | | | | | |
| Model | | | _ | | | | | | |
| 1082 - Test gauge | | | 1082 | | | | | | |
| System | | | | | | | | | |
| A - Bronze tube and brass socket (max. available | range 400 psi) | | | | | | | | |
| P - Monel® tube and socket | | | | Р | | | | | |
| Case Style | | | | | | | | | |
| S - Solid front | | | | | S | _ | | | |
| Process Connection Size | | | | | | - | | | |
| 02 - 1/4 NPT Male | | | | | | 02 | | | |
| 04 - 1/2 NPT Male | | | | | | | | | |
| Process Connection Location | | | | | | | | | |
| L - Lower | | | | | | | L | _ | |
| B - Back | | | | | | | | | |
| Ranges (See additional range tables on page 3 | 3) | | | | | | | _ | |
| 15# - 0-15 psi | | | | | | | | | |
| 30# - 0-30 psi | | | | | | | | | |
| 60# - 0-60 psi | | | | | | | | | |
| 100# - 0-100 psi | | | | | | | | 100# | |
| 160# - 0-160 psi | | | | | | | | | |
| 200# - 0-200 psi | | | | | | | | | |
| 300# - 0-300 psi | | | | | | | | | |
| 400# - 0-400 psi | | | | | | | | | |
| 600# - 0-600 psi (Monel wetted parts only) | | | | | | | | | |
| 1000# - 0-1,000 psi (Monel wetted parts only) | | | | | | | | | |
| Options (If choosing an option(s) must include | an "X") | | | | | | | | -X |
| PD - Acrylic window | | | | | | | | | PD |
| SG - Safety Glass window | | | | | | | | | |
| TS - Throttling devices | | | | | | | | | |
| AY - Aluminum case, threaded ring (N/A with adj. | dial, Lower connection only) | | | | | | | | |
| TY - Phenolic case, threaded ring (N/A with adj. of | dial, Lower connection only) | | | | | | | | |



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| | | STANDARD | RANGES | |
|-------------------|-----------|---------------------|--------|----------------------|
| | Rai | nge | Grad | uations |
| Vacuum | psi | inHg Figu Inte r | | Minor Graduations |
| Vac | - | 30/0 inHg | 2 inHg | 0.1 inHg |
| | 0/15 | - | 1 | 0.05 |
| | 0/30 | - | 2 | 0.1 |
| | 0/60 | - | 5 | 0.2 |
| | 0/100 | - | 5 | 0.5 |
| | 0/150 | - | 10 | 0.5 |
| ė | 0/200 | - | 10 | 1 |
| Positive Pressure | 0/300 | - | 20 | 1 |
| Pre | 0/400 | - | 20 | 2 |
| tive | 0/600 | - | 50 | 2 |
| Posi | 0/800 | - | 50 | 5 |
| | 0/1000(1) | - | 50 | 5 |
| | 0/1500 | - | 100 | 5 |
| | 0/2000 | - | 100 | 10 |
| | 0/3000 | - | 200 | 10 |
| | 0/5000 | - | 500 | 10 |
| | 0/10,000 | - | 1000 | 50 |

| | STAN | DARD RANGI | ES |
|-------------------|----------|------------|----------|
| Vacuum | Bar | kPa | kg/cm² |
| Vac | -1/0 | -100/0 | -1/0 |
| Þ | -1/0/1.5 | -100/0/150 | -1/0/1.5 |
| II OC | -1/0/3 | -100/0/300 | -1/0/3 |
| Compound | -1/0/5 | -100/0/500 | -1/0/5 |
| 3 | -1/0/9 | -100/0/900 | -1/0/9 |
| | 0/4 | 0/400 | 0/4 |
| | 0/6 | 0/600 | 0/6 |
| | 0/1 | 0/100 | 0/1 |
| | 0/1.6 | 0/160 | 0/1.6 |
| | 0/2.5 | 0/250 | 0/2.5 |
| | 0/4 | 0/400 | 0/4 |
| nre | 0/6 | 0/600 | 0/6 |
| ess | 0/10 | 0/1000 | 0/10 |
| Positive Pressure | 0/16 | 0/1600 | 0/16 |
| sitiv | 0/25 | 0/2500 | 0/25 |
| 2 | 0/40 | 0/4000 | 0/40 |
| | 0/60(1) | 0/6000 | 0/60 |
| | 0/100 | 0/10,000 | 0/100 |
| | 0/160 | 0/16,000 | 0/160 |
| | 0/250 | 0/25,000 | 0/250 |
| | 0/400 | 0/40,000 | 0/400 |
| | 0/600 | 0/60,000 | 0/600 |
| | | | |

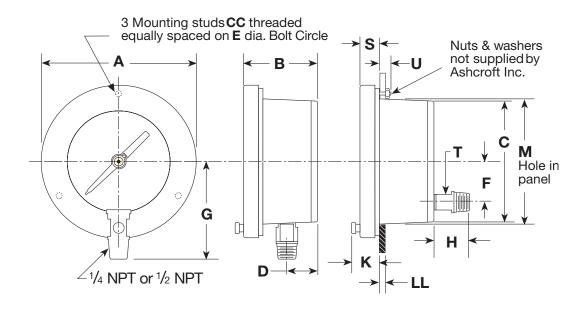
| COMPOUND RANGES | | | | | | | | | | |
|-----------------|---|--|--|--|--|--|--|--|--|--|
| | inHg/psi | | | | | | | | | |
| 30/0/15 | 30/0/20 | 5/0/2 | | | | | | | | |
| 30/0/30 | 30/0/20 | 5/0/1 | | | | | | | | |
| 30/0/60 | 30/0/20 | 2/0/1 | | | | | | | | |
| 30/0/100 | 30/0/10 | 2/0/1 | | | | | | | | |
| 30/0/150 | 10/0/5 | 1/0/0.5 | | | | | | | | |
| 30/0/200 | 10/0/5 | 1/0/0.5 | | | | | | | | |
| 30/0/300 | 10/0/5 | 0.5/0/0.2 | | | | | | | | |
| 30/0/400 | 5/0/2 | 0.5/0/0.1 | | | | | | | | |
| | 30/0/15 30/0/30 30/0/60 30/0/100 30/0/150 30/0/200 30/0/300 | inHg/psi 30/0/15 30/0/20 30/0/30 30/0/20 30/0/60 30/0/20 30/0/100 30/0/10 30/0/150 10/0/5 30/0/200 10/0/5 30/0/300 10/0/5 | | | | | | | | |



1082 Test Gauge

DIMENSIONS in [] are millimeters

For reference only, consult Ashcroft for specific dimensional drawings



| Dial Size (inches) | A | В | С | СС | D | E | F | G | н | К | ш | M | S | Т | U |
|--------------------|---|------------------------------------|--|--------|--|--|---------------------------------------|-------------------------------------|---------------------------------------|--|---|--|-------------------------------------|-------------------------------------|-------------------------------------|
| 41/2 | 6 ³ / ₃₂ [155] | 2 ⁷ / ₈ [73] | 4 ³ / ₄ [121] | #10-24 | 1 ³ / ₁₆ [30] | 5³/ ₈ [137] | 1 ⁵ / ₈ [41] | 4 ⁷ / ₈ [100] | 1 ³ / ₈ [35] | ¹¹ / ₃₂ [34] | | 4 ⁷ / ₈ [124] | | ⁵ / ₈ [16] | ³/₄ [19] |
| 6 | 7 ⁹ / ₁₆ [192] | 2 ⁷ / ₈ [73] | 4 ³ / ₄ [121] | 1/4-20 | 1 ³ / ₁₆ [30] | 7 [178] | 1 ⁵ / ₈ [41] | 4 ½ [114] | 1 ³ / ₈ [35] | 1 ¹ / ₃₂ [34] | ¹ / ₈ to ½ [3 to 13] | 6½ [165] | ⁵ / ₈ [16] | ⁵ / ₈ [16] | ³ / ₄ [19] |
| 81/2 | 10 ¹ / ₁₆ [257] | 2 ⁷ / ₈ [73] | 4 ³ / ₄ [121] | 1/4-20 | 1/4-20 | 9 ⁵ / ₈ [244] | 1 ⁵ / ₈ [41] | 6 [152] | 1 ³ / ₈ [35] | ¹¹ / ₃₂ [34] | | 9 [229] | | ⁵ / ₈ [16] | ³ / ₄ [19] |